ABSTRACT OF THE DISCLOSURE

An integrated transceiver for achieving bi-directional communication along a single fiber-optic cable in a fiber-optic network. The transceiver includes an active part for transmit and receive portions of the transceiver. The active part includes a photo diode and a laser diode attached to a substrate. Bi-directional communication is achieved by using an optical circulator. The optical circulator may include components that limit back reflections into the active part of the transceiver. The optical circulator is attached to the substrate and connected optically to the active part.

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